

**Amendment to the Claims:**

1. (Cancelled)
2. (Currently Amended) [[A]] The method as claimed in claim [[1]] 5, wherein the measurement data are converted into further including:  
dynamically updated—updating in real-time the histogram readout objects and the cumulative curve.
3. (Currently Amended) [[A]] The method as claimed in claim [[1]] 5, wherein further including:  
filling the histogram is filled with measurement data from a time window advancing in real time with selectable fixed length.
4. (Previously Presented) A method as claimed in claim 2, wherein, during the conversion, the computer generates aids for the retrospective analysis of histograms in the form of selectable functions that can be displayed on a viewing screen and outputs them together with the converted data combined as picture signals.  
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5. (Currently Amended) A method as claimed in claim 4, wherein, of automatically displaying medical measurement data in which a computer:  
receives the medical measurement data,  
automatically converts in real time the received measurement data into  
5 data for histograms,  
during the conversion, the computer generates a cumulative curve indication of the medical measurement data, and  
outputs it together with the converted data the cumulative curve  
combined with the histograms as picture signals.

6. (Currently Amended) [[A]] The method as claimed in claim [[1]] 5, wherein the computer processes control signals that are produced by input means communicating with the computer and that serve to control the conversion and/or the output of the picture signals.

7. (Currently Amended.) A device for automatically displaying medical measurement data, comprising a computer that is designed for receiving medical measurement data, automatic real-time conversion of the received measurement data into data for histograms and for outputting the converted data as 5 picture signals programmed to perform the method as claimed in claim 5.

8. (Currently Amended) [[A]] The device as claimed in claim [[6]] 7, wherein the computer is designed to convert the measurement data further programmed to dynamically update[[d]] in real-time the histogram readout objects and the cumulative curve.

9. (Currently Amended) A device for automatically displaying medical measurement data, comprising a computer programmed to perform the method as claimed in claim 4 6-8, wherein the computer is designed to generate, during the conversion, aids for the retrospective analysis of histograms in the form of 5 selectable functions that can be displayed on a viewing screen and to output them together with the converted data combined as picture signals.

10. (Currently Amended) A device for automatically displaying medical measurement data, comprising a computer programmed to perform the method as claimed in claim 21, 5, wherein the computer is designed to generate, during the conversion, a cumulative curve readout of the medical measurement data 5 and to output it together with the converted data combined as picture signals.

11. (Cancelled).

12. (Currently Amended) A medical monitoring device, comprising [[a]] the displaying device as claimed in claim [[5]] 7.

13. (Cancelled).

14. (Currently Amended) The medical monitoring device as claimed in claim [[13]] 15, further comprising computer means for generating a cumulative curve readout of the medical measurement data retrospective analysis aids including at least one of:

5 an inop bin for displaying times of invalid or out of action measurement data;  
a deviation readout;  
a direction-change indicator;  
a histogram snapshot and trends aid; and  
10 a combination of a plurality of histograms.

15. (Currently Amended) [[The]] A medical monitoring device as claimed in claim 14, wherein the cumulative curve is displayed concurrently with the histogram data wherein comprising:

5 computer means for receiving medical measurement data;  
computer means for automatically converting the medical measurement data into histogram data; as the computer means is receiving the medical measurement data; and  
10 displaying means for visually displaying the histogram data and the cumulative curve is displayed concurrently with the histogram data as the medical measurement data is received.

16. (Currently Amended) The medical monitoring device as claimed in claim [[13]] 15 further comprising an alarm indicator that is triggered when a selectable number measurements measurement of histogram data are is measured above or below a selectable threshold lower or upper alarm limit level.

17. (Currently Amended) The medical monitoring device as claimed in claim 13, wherein the histogram data is binned into selectably-sized histogram bins, the histogram bin size being definable by the user.

18. (Previously Presented) The medical monitoring device as claimed in claim 13 further comprising display means for displaying real-time signal patterns of the medical measurement data.

19. (Currently Amended) The medical monitoring device as claimed in claim 18, wherein the real-time signal patterns and the histogram data are displayed next to one another on the display means.

20. (New) The method as claimed in claim 5 further including:

displaying the histogram with the cumulative curve superimposed, the histogram and the cumulative curve having common axes and a common scales.

21. (New) The method as claimed in claim 4, wherein the retrospective analysis aids include at least one of:

a cumulative curve cursor for determining a percentage of time that histogram values are below a current cumulative cursor position;

5 range-selection cursors for determining a percentage of time that histogram values are within limits defined by the range-selection cursors;

a variability/stability readout that provides information about variability of the measurement data; and

10 a deviation and direction-change readout that shows deviation from a mean histogram value and a direction of measurement data change.

22. (New) A computer readable medium storing a computer program for controlling a computer to perform the method as claimed in claim 5.

23. (New) A medical monitoring device comprising:  
a display;  
a computer programmed to receive medical measurement data, convert  
the medical measurement data to histograms, dynamically update the histograms in  
5 real time, generate aids for the retrospective analysis of histograms, and control the  
display to display the histograms and the retrospective histogram analysis aids, the  
retrospective histogram analysis aids including at least one of:  
a cumulative curve cursor for determining a percentage of time that  
histogram values are below a current cumulative cursor position;  
10 range-selection cursors for determining a percentage of time that  
histogram values are within limits defined by the range-selection cursors;  
a variability/stability readout that provides information about  
variability of the measurement data; and  
a deviation and direction-change readout that shows deviation from a  
15 mean histogram value and a direction of measurement data change.